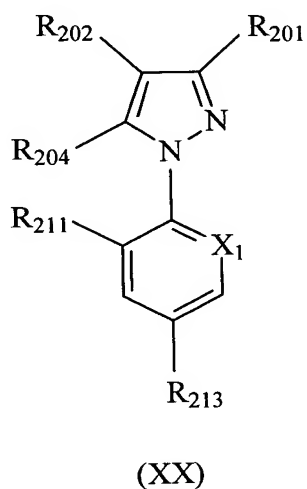


WHAT IS CLAIMED IS:

1. The method of controlling parasites in or on an animal in need of such control, said method comprising orally administering to said animal a parasitically effective, substantially non-emetic amount of a 1-arylpyrazole having the formula (XX):

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wherein:

R<sub>201</sub> is cyano, C(O)alkyl, C(S)NH<sub>2</sub>, alkyl, C(=NOH)NH<sub>2</sub> or C(=NNH<sub>2</sub>)NH<sub>2</sub>;

10 R<sub>202</sub> is S(O)<sub>h</sub>R<sub>203</sub>, C<sub>2</sub>-C<sub>3</sub> alkenyl, C<sub>2</sub>-C<sub>3</sub> haloalkenyl, cycloalkyl, halocycloalkyl or C<sub>2</sub>-C<sub>3</sub> alkynyl;

R<sub>203</sub> is alkyl or haloalkyl;

R<sub>204</sub> is -N(R<sub>205</sub>)C(O)aryl;

15 R<sub>205</sub> is alkyl, haloalkyl, cycloalkyl, halocycloalkyl, cycloalkylalkyl, halocycloalkylalkyl, alkoxyalkyl, haloalkoxyalkyl, C<sub>3</sub>-C<sub>5</sub> alkenyl, C<sub>3</sub>-C<sub>5</sub> haloalkenyl, C<sub>3</sub>-C<sub>5</sub> alkynyl, or C<sub>3</sub>-C<sub>5</sub> haloalkynyl;

X<sub>1</sub> is nitrogen or C-R<sub>212</sub>;

$R_{211}$  and  $R_{212}$  are, independently, halogen, hydrogen, CN or  $NO_2$ ;  
 $R_{213}$  is halogen, haloalkyl, haloalkoxy,  $-S(O)_kCF_3$ , or  $-SF_5$ ; and  
h and k are, independently, 0, 1, or 2;  
or a veterinarily acceptable salt thereof.

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2. The method according to Claim 1, wherein  $R_{201}$  is cyano;  $R_{202}$  is  $SCF_3$ ,  $S(O)CF_3$  or  $S(O)_2CF_3$ ;  $R_{211}$  is Cl;  $X_1$  is C-Cl;  $R_{213}$  is  $CF_3$  or  $SF_5$ ;  $R_{205}$  is  $CH_3$  and aryl is phenyl, thienyl, furyl or pyridyl, each of which is unsubstituted or substituted by alkoxy, haloalkyl or halogen.

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3. The method according to Claim 2, wherein each of phenyl, thienyl, furyl and pyridyl is unsubstituted or substituted by methoxy, trifluoromethyl or chloro.

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4. The method according to Claim 3, wherein aryl is phenyl, 4-methoxyphenyl, 4-trifluoromethylphenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 6-chloro-2-pyridyl, 6-trifluoromethyl-2-pyridyl, 5-chloro-2-furyl, 5-trifluoromethyl-2-furyl, 5-methoxy-2-thienyl, or 5-trifluoromethyl-2-thienyl.

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5. The method according to Claim 4, wherein  $R_{213}$  is  $CF_3$ .

6. The method according to Claim 5, wherein:

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- (a)  $R_{202}$  is  $SCF_3$  and aryl is 4-methoxyphenyl;
- (b)  $R_{202}$  is  $SCF_3$  and aryl is 4-trifluoromethylphenyl; or
- (c)  $R_{202}$  is  $SCF_3$  and aryl is 2-furyl.

7. The method according to Claim 1, wherein the animal is a domestic animal.

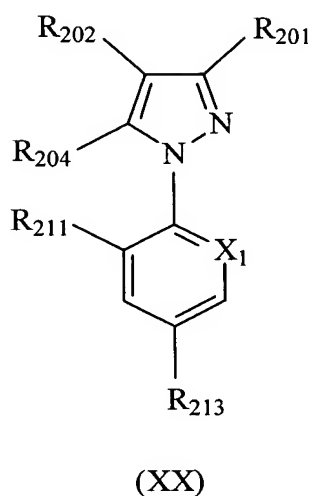
5 8. The method according to Claim 6, wherein the domestic animal is a cat or dog.

9. The method according to Claim 1, wherein the compound of formula (XX) is orally administered to the animal in a dosage of from 0.1 to 500 mg/kg.

10 10. The method according to Claim 1, wherein the compound of formula (XX) is administered at a frequency of from about once per week to about once per year.

15 11. The method according to Claim 9, wherein the compound of formula (XX) is administered at a frequency of from about once per week to about once per year.

12. A compound having the formula (XX):



wherein:

5             $R_{201}$  is cyano, C(O)alkyl, C(S)NH<sub>2</sub>, alkyl, C(=NOH)NH<sub>2</sub> or C(=NNH<sub>2</sub>)NH<sub>2</sub>;

$R_{202}$  is S(O)<sub>h</sub>R<sub>203</sub>, C<sub>2</sub>-C<sub>3</sub> alkenyl, C<sub>2</sub>-C<sub>3</sub> haloalkenyl, cycloalkyl, halocycloalkyl or C<sub>2</sub>-C<sub>3</sub> alkynyl;

$R_{203}$  is alkyl or haloalkyl;

10            $R_{204}$  is -N(R<sub>205</sub>)C(O)aryl;

$R_{205}$  is alkyl, haloalkyl, cycloalkyl, halocycloalkyl, cycloalkylalkyl, halocycloalkylalkyl, alkoxyalkyl, haloalkoxyalkyl, C<sub>3</sub>-C<sub>5</sub> alkenyl, C<sub>3</sub>-C<sub>5</sub> haloalkenyl, C<sub>3</sub>-C<sub>5</sub> alkynyl, or C<sub>3</sub>-C<sub>5</sub> haloalkynyl;

             X<sub>1</sub> is nitrogen or C-R<sub>212</sub>;

15            $R_{211}$  and  $R_{212}$  are, independently, halogen, hydrogen, CN or NO<sub>2</sub>;

$R_{213}$  is halogen, haloalkyl, haloalkoxy, -S(O)<sub>k</sub>CF<sub>3</sub>, or -SF<sub>5</sub>; and

             h and k are, independently, 0, 1 or 2;

             or a veterinarily acceptable salt thereof.

13. A compound according to Claim 12, wherein  $R_{201}$  is cyano;  $R_{202}$  is  $SCF_3$ ,  $S(O)CF_3$  or  $S(O)_2CF_3$ ;  $R_{211}$  is Cl;  $X_1$  is C-Cl;  $R_{213}$  is  $CF_3$  or  $SF_5$ ;  $R_{205}$  is  $CH_3$  and aryl is phenyl, thienyl, furyl or pyridyl, each of which is unsubstituted or substituted by alkoxy, haloalkyl or halogen.

5

14. A compound according to Claim 13, wherein each of phenyl, thienyl, furyl and pyridyl is unsubstituted or substituted by methoxy, trifluoromethyl or chloro.

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15. A compound according to Claim 14, wherein aryl is phenyl, 4-methoxyphenyl, 4-trifluoromethylphenyl, 2-thienyl, 3-thienyl, 2-furyl, 3-furyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, 6-chloro-2-pyridyl, 6-trifluoromethyl-2-pyridyl, 5-chloro-2-furyl, 5-trifluoromethyl-2-furyl, 5-methoxy-2-thienyl, or 5-trifluoromethyl-2-thienyl.

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16. A compound according to Claim 15, wherein  $R_{213}$  is  $CF_3$ .

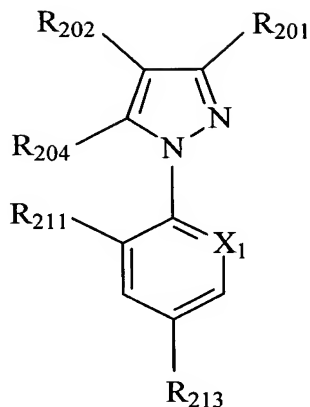
17. The compound according to Claim 16, wherein:

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- (a)  $R_{202}$  is  $SCF_3$  and aryl is 4-methoxyphenyl;
- (b)  $R_{202}$  is  $SCF_3$  and aryl is 4-trifluoromethylphenyl; or
- (c)  $R_{202}$  is  $SCF_3$  and aryl is 2-furyl.

18. A composition comprising a parasitically effective, substantially non-emetic amount of a compound having the formula (XX):

25



(XX)

wherein:

R<sub>201</sub> is cyano, C(O)alkyl, C(S)NH<sub>2</sub>, alkyl, C(=NOH)NH<sub>2</sub> or C(=NNH<sub>2</sub>)NH<sub>2</sub>;

5 R<sub>202</sub> is S(O)<sub>h</sub>R<sub>203</sub>, C<sub>2</sub>-C<sub>3</sub> alkenyl, C<sub>2</sub>-C<sub>3</sub> haloalkenyl, cycloalkyl, halocycloalkyl or C<sub>2</sub>-C<sub>3</sub> alkynyl;

R<sub>203</sub> is alkyl or haloalkyl;

R<sub>204</sub> is -N(R<sub>205</sub>)C(O)aryl;

10 R<sub>205</sub> is alkyl, haloalkyl, cycloalkyl, halocycloalkyl, cycloalkylalkyl, halocycloalkylalkyl, alkoxyalkyl, haloalkoxyalkyl, C<sub>3</sub>-C<sub>5</sub> alkenyl, C<sub>3</sub>-C<sub>5</sub> haloalkenyl, C<sub>3</sub>-C<sub>5</sub> alkynyl, or C<sub>3</sub>-C<sub>5</sub> haloalkynyl;

X<sub>1</sub> is nitrogen or C-R<sub>212</sub>;

R<sub>211</sub> and R<sub>212</sub> are, independently, halogen, hydrogen, CN or NO<sub>2</sub>;

R<sub>213</sub> is halogen, haloalkyl, haloalkoxy, -S(O)<sub>k</sub>CF<sub>3</sub>, or -SF<sub>5</sub>; and

h and k are, independently, 0, 1, or 2;

15 or a veterinarily acceptable salt thereof;

and a veterinarily acceptable carrier therefor.

19. A veterinary composition according to Claim 18 comprising, in oral unit dosage form:

(a) a parasitically effective, substantially non-emetic amount of a compound having the formula (XX) as defined in Claim 18, or a veterinarily acceptable salt thereof; and

(b) a veterinarily acceptable carrier therefor.

20. A veterinary composition according to Claim 19, wherein the oral unit dosage amount of the compound of formula (XX) is from 0.1 to 500 mg per kg of animal body weight.